

EFFECT OF MODULARITY ON THE FIELD ARTILLERY BRANCH

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USAWC STRATEGY RESEARCH PROJECT

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ABSTRACT

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EFFECT OF MODULARITY ON THE FIELD ARTILLERY BRANCH

...You are the Army's ultimate "Pentatheles" with your leadership, flexibility, agility, and attitude... you should be very proud of what you have accomplished.

—Lieutenant General Raymond Odierno¹

For hundreds of years, the field artillery has been known as the "King of Battle" because of its decisive effect on the battlefield. The very foundation of the artillery profession was then and is now based on mathematic computations and technological adaptation. The history of the field artillery is replete with names of great generals and innovators who revolutionized the science of large caliber support weaponry. As early as 1620, King Gustavus Adolphus of Sweden implemented revolutionary changes to the field artillery in its organization and tactics, and Frederick the Great of Prussia was the first to establish the importance of massing fires against the enemy.² Adapting to change and accepting innovations is a hallmark of forward-thinking artillery professionals, although some field artillerymen did resist change. For example, Major General (MG) Robert M. Danford, Chief of Field Artillery, United States (U.S.) Army, from 1938 to 1942 vehemently resisted giving up horse drawn artillery because he doubted the dependability and cross country mobility of mechanized systems and loathed to relinquish old traditions.³ Author John P. Kotter in his book Leading Change notes however, that many leaders of earlier generations did not grow up in an era when change was common. Change occurred incrementally and infrequently, and conventional wisdom dictated "If it ain't broke, don't fix it."⁴

As we enter the 21st century, many of the traditional paradigms of warfare are under revision within the construct of transnational and non-state actors and the very

real threat of the use of weapons of mass destruction. As we enter a new era of warfare not highlighted by hegemonic states but rather by an information age dominated by twenty-four hour news cycles, terrorist organizations, and asymmetric threats. As the tactical nature of warfare is changing, so too must the Field Artillery branch lest we allow history to judge present field artillery leaders as harshly as MG Danford. The purpose of this manuscript is to identify the unintended consequences of the U.S. Army's transformation to modular brigade-based units on the professionalism of the Field Artillery, the viability of the newly published Field Artillery Campaign Plan, and future challenges for the Field Artillery branch. It is important to note here that the Army is undertaking a monumental task by transitioning to a modular force while engaging in combat operations in Iraq and Afghanistan. The requirement of combatant commanders for "boots on the ground" is forcing artillery units to fulfill multiple and varied roles.⁵ It is, therefore, sometimes difficult to separate whether an identified shortcoming is the result of the non-standard operating environment of today's contingency operations or directly attributable to the implementation of the modular design. In each example, this monograph will identify whether the issue is a result of modularity, the current operational environment, or both.

Modular Brigade Transformation- Inception and Implementation

The U.S. Army's current transition to a modular force was conceived over two decades but born very quickly with the Army involved in simultaneous campaigns in Iraq and Afghanistan. Probably the earliest thoughts on transformation were forwarded by then Chief of Staff of the Army, General Gordon Sullivan in response to the Army's performance during Operation Desert Storm.⁶ While the U.S. Army was hugely

successful during that conflict, it was fought by division-level combat formations in a traditional state on state conflict. Although initial combat elements of the 82nd Airborne and 101st Air Assault Divisions arrived very quickly, it took substantially longer to mass the heavy forces required for the operation. Ultimately five additional U.S. Army heavy divisions, two U.S. Marine Divisions, one United Kingdom Armored Division and numerous combat support and combat service support elements massed over a six month period in preparation for the operation totaling approximately 543,000 troops. Sullivan appropriately reasoned that in the future the Army would need to be more agile and able to deploy much faster. Looking toward the 21st century he launched a program called the “modern Louisiana Maneuvers” which would eventually become known as Force XXI.⁷ Under the next Army Chief of Staff, GEN Dennis Reimer, Force XXI was to become the interim Army force, essentially digitizing the existing legacy force that was available in the late 1990s. But what Force XXI lacked was a wholesale change of doctrine and organization.⁸

In 1997, Army Colonel and strategist Douglas A. Macgregor published an influential work titled “Breaking the Phalanx- A New Design for Landpower in the 21st Century.” Through the use of historical vignettes and thoughtful analysis, Macgregor proposed several principles which reinforced the ongoing thought process in the Pentagon at the time. Macgregor posited:

Like Caesar's Legions, Joint Task Forces (JTFs) will need an Army component that is composed of highly mobile, self-contained, independent “all-arms” combat forces-in-being. These Army forces will have to be structured within an evolving joint military framework to exploit new technology and increased human potential for rapid and decisive action and provide the foundation on land for coherent joint military operations in a new and uncertain strategic environment.⁹

Macgregor further suggests that technological advances are merely transitory in nature, that truly large payoffs require changes in strategy, doctrine, and organization.¹⁰ Macgregor's work would later become part of the basis for not only the Cobra II plan for the invasion of Iraq¹¹ but as a guidepost for modularity issues for years to come.¹²

When General Eric Shinseki became the Chief of Staff of the Army in 1999, he moved ahead dramatically with the concepts put forth by his successors and strategists like Colonel Macgregor to initiate the first new unit of the interim force, later known as Stryker Brigades.¹³ High mobility medium weight wheeled units designed to bridge the capabilities gap between heavy and light forces, Stryker Brigades would incorporate all the newest digitally based information technologies with a much shorter “tooth to tail” ratio.¹⁴ More importantly, they are capable of operating across the spectrum of conflicts the Army expected to find in the future.¹⁵ The first new brigade was reorganized, equipped and employed into combat in an amazingly short period of time. Though the implementation directive was published in December 1999, within three short years the unit found itself in Iraq in November of 2003.¹⁶ The unit performed brilliantly in combat, with one Brigade assuming the battle space of a division. It was able to do this by leveraging its inherent speed, increased numbers of Soldiers in combat units and digitally-based intelligence and situational awareness tools such as Force XXI Battle Command Brigade-and-Below (FBCB2) to create situational overmatches against a determined and lethal enemy.

Shortly after assuming his responsibilities as the Secretary of Defense, Donald Rumsfeld oversaw the 2001 Quadrennial Defense Review. With it he endorsed a wholesale change of U.S. military strategy.¹⁷ The decades old threat-based, “two major

theater of war" construct changed to a capabilities-based strategy known as "hold one, win one". In the words of Secretary Rumsfeld:

...we needed a more realistic and balanced assessment of our near term war fighting needs...by removing the requirement to maintain a second occupation force, we can free up new resources for the future and for other, lesser contingencies that may now confront us.¹⁸

The events of September 11, 2001 and the stunning successes by Special Operations Forces in the Afghanistan War in October of 2001 only heightened the sense of urgency for major reforms not only in intelligence but in the Army as a whole. Secretary Rumsfeld believed that a strategy of preemptive attacks featuring Special Operations forces and lighter, more mobile ground forces as employed in Afghanistan was clearly the way of future warfare for the United States.¹⁹

GEN Eric Shinseki retired quietly in June of 2003 following the invasion of Iraq in March by U.S. and Coalition forces. His relationship soured with the Secretary of Defense over key issues including the cancellation of the Crusader artillery system in 2002²⁰ and finally over comments he gave under oath to the Senate Armed Services Committee on 25 February 2003. His estimate of "several hundred thousand" Soldiers to secure post war Iraq directly contradicted the published war plans and Rumsfeld's vision.²¹

Secretary Rumsfeld sought to change what he perceived as an Army bureaucracy that was too institutionalized and opposed the kind of change he had in mind. In order to push his vision of transformation through the Army quickly, Secretary Rumsfeld bypassed numerous active duty Generals and selected retired GEN Peter Schoomaker, a Special Operations Forces (SOF) officer by trade to head the Army.²² An officer with background in Special Operations was exactly what Secretary Rumsfeld

wanted- first to infuse a SOF, expeditionary mindset across the Army and second because he would be less likely to possess parochialism towards traditional Army systems and institutions.²³ As it became apparent that the war in Iraq was going to be a long-term undertaking, the need for additional troops to rotate into both Iraq and Afghanistan became critical. Even a temporary 30,000 Soldier increase in end strength, and transitioning the National Guard from a strategic reserve force to an operational one²⁴ was not enough. To meet the intended end state of forty-eight active component Brigade Combat Teams both personnel reallocation and the abolition of force structure was required in the Active force.²⁵

Whether acknowledged or not in 2004, apparently transformation to the modular brigades concept is designed to both generate boots on the ground for Geographic Combatant Commanders and to transform the Army into a more expeditionary organization. The U.S. Army 2008 Posture Statement in Addendum G, Modularity, states as its primary goal for the U.S. Army to transition to modular brigade units to increase the number of brigade combat teams for operational commitments while maintaining combat effectiveness that is equal to or better than previous divisional brigades.²⁶ There is no doubt that the current Heavy Brigade Combat Teams (HBCTs) possess far great intelligence, communications and reconnaissance capabilities than the legacy Brigades of just a few years ago. A study prepared by the Institute for Defense Analysis (IDA) in 2005 suggests the lighter, more agile formations of the modular HBCTs and Infantry BCTs (IBCTs) suffer a net reduction in combat power because they possess only two maneuver battalions per brigade and lack a key ingredient for counter-insurgency warfare, the combat infantrymen.²⁷ The Army was

severely critical of the report citing "faulty assumptions, incomplete and questionable analysis" based on "Cold War Metrics."²⁸ Specifically the Army points to the report's omission of scouts from the Armored Reconnaissance Squadron, engineers in combined arms battalions and other enablers from the aggregate cumulative "boots on the ground" in the comparison .²⁹

Still, there is the perception by some that the number of Soldiers available for tactical missions in the new modular organizations is too few. The only exception is the Stryker Brigades, which possess three maneuver battalions instead of two for the IBCTs and HBCTs.³⁰ This criticism is also borne out statistically. Defense analyst and author Andrew F. Krepenovich notes that in the pre-modular force, known as the Legacy Force, the Total Army possessed 233 combat battalions with 699 maneuver companies.³¹ When modularity is complete in 2011, the Army (reserves and active) will possess 161 maneuver battalions with 541 maneuver companies- roughly a reduction of 30% of battalions and a 22% reduction in the number of maneuver companies.³²

Yet, regardless of what some critics may argue, the modular design BCTs are performing well in combat. There is no doubt that the consolidation of Brigade-size maneuver units down to three basic maneuver BCTs is simplifying logistical requirements across the Army. In the past, there were a plethora of different units, including: Armored Cavalry Regiments, Airborne Brigades, Air Assault Brigades, Heavy Brigades, Stryker Brigades, Light Infantry Brigades. Now all of these are either Infantry BCTs, Stryker BCTs, or Heavy BCTs.

Modularity also dramatically improves the reconnaissance capabilities of the brigades with the addition of the Reconnaissance Squadron in lieu of the

Reconnaissance Company found in the Legacy Brigades. These Squadrons, combined with increased numbers of battle command systems across BCTs dramatically increases a brigade commander's situational awareness. Enhanced BCT staffs and organic combat service support elements within the BCTs are also dawning favorable reviews from commanders in combat.³³ Most importantly, the modular BCTs staff receives both manning and training adequate for both service and joint mission sets. A poignant example was the 1st Brigade 3d Infantry Division under the operational control of the 2nd Marine Expeditionary Force (MEF) in Multi-National Forces West (MNF-W), Al Anbar Province in 2007-2008.³⁴

However, within all these gains, the effects of operational requirements in support of counter insurgency are greatly impacting the Field Artillery as a branch. The greatest and most dramatic challenge is the field artillery organization. At the battalion level, cannon battalions reorganized from three six gun batteries to two eight gun batteries. That equates to a loss of two guns and one company sized unit. Also, the traditional Service Battery is no longer part of the field artillery battalion. It is now a Forward Service Company (FSC) assigned to the Forward Support Battalion. Thus, the net loss for company command opportunities at the battalion level is 40 percent with the drop from five to three commands. The fire support element in a legacy direct support battalion also reorganized becoming an organic element of its traditionally supported maneuver units and the Brigade Headquarters. Additionally, the field artillery battalion commander, traditionally the senior artilleryman in the brigade, no longer serves as the fire support coordinator (FSCOORD) for the brigade. A new FA Lieutenant Colonel (LTC) position fills that role on the brigade staff as the Effects Coordinator. He is

responsible for planning all battlefield effects and is the Brigade Commander's principle advisor on fire support matters. This effectively negates the Fires Battalion Commander's prominence and more importantly, his experience in fire support matters.

The reduction in the number of field artillery brigades and the total elimination of both the Corps Artillery Headquarters and Division Artillery Headquarters (DIVARTYs) is devastating.³⁵ Clearly the solution to "flatten" command and control was to pacify an Office of the Secretary of Defense (OSD) perception of excessive and unnecessary redundancy in headquarters units. This was not a new concept since the desire to reduce the number of artillery systems and commands pre dates Operation Iraqi Freedom in a report to the U.S. Congress in 2002 from OSD. Yet, the elimination of the DIVARTY headquarters, in particular, creates a significant consequence that is only now becoming apparent.³⁶

OSD's report also posits the decline in U.S. casualty rates from enemy indirect fire continues as a key reason to reduce these vital headquarters. It notes casualties from enemy indirect fire in Operation Desert Storm were only 1% of the total casualties, compared to 71% and 55% of total casualties for WWI and WWII respectively.³⁷ It correctly noted that effective U.S. counter battery operations is the primary reason for the ineffectiveness of enemy artillery systems. While the report does acknowledge the effectiveness of U.S. counter battery operations, it fails to recognize the underlying reason for the success. The training, oversight, execution and leadership in counter battery operations from Division Artillery and Field Artillery Brigade Headquarters is the reason why. That trend continued during Operation Iraqi Freedom in March 2003. Despite its dispersion across 300 miles of desert and urban terrain, the 3ID suffered no

casualties due to enemy indirect fire. This was directly attributed to the efforts of the Division Artillery Headquarters and its inherent capabilities.³⁸

For field artillery units, the reality of counter insurgency operations and modularity necessitates that artillerymen cross-train to accomplish other in lieu of missions.³⁹ Some units train as infantrymen,⁴⁰ while others perform duties the commander assigns them such as police and security partnership missions.⁴¹ The flexibility of artillery units to perform these diverse, non-standard missions is a direct reflection of the quality of the American Soldier. Despite the accolades units receive for these multi-functional Soldiers, there is a price to pay in terms of core proficiency and officer job satisfaction.

Turning Point

Since the inception of modularity by the Army, many field artillery officers quietly lamented the negative implications it was having on the Field Artillery profession. There are widespread examples of declining skills and a general loss of competence across the branch. This is especially true in the junior Officer and junior Noncommissioned Officer (NCO) grades.⁴² While the effects are well known to many artillerymen, it is considered unprofessional and small minded to verbalize any disparity towards the modular concept as it pertains to field artillery branch and its formations.

The unspoken and understood guidance across the force was “modularity is here, get on board or get out.” Many others, even at the highest levels of the Army, felt artillery was and is becoming irrelevant. In a post OIF 1 article written by retired Colonel Daniel Whiteside in 2003, he noted that in early summer 2003 senior Pentagon officers began speaking about the irrelevance of the field artillery.⁴³ He noted that there was a

growing belief that air delivered precision fires would eventually replace most field artillery ground based systems.⁴⁴

In the artillery community, a few individuals, most notably the senior fire support trainers at the Combined Training Centers (CTCs) continued to note the rapid decline of lethal fire support skills, both on the gun line and amongst fire support teams. An unpublished monograph written by the senior fire support trainers at the National Training Center (NTC), the Joint Readiness Training Center (JRTC) and a former field artillery battalion commander, clearly summarized the decline of skills displayed by rotational units. They stated:

The proximate cause for the demonstrated decline in skills and competence is the modular fires concept. These effects were both predictable and predicted...predicted in that...gave immediate and repetitive warnings to maneuver leaders at all levels and were either ignored, or worse called branch parochialists.⁴⁵

Clearly, the artillery communities at the brigade and below understood the issues but were not being heard.

All of this changed in the summer of 2007. Concerned by what they perceived as a serious decline in the field artillery branch, three former brigade commanders co-authored a white paper that completely changed the landscape for the debate surrounding the effects of modularity on the field artillery. Titled *“The King and I: The Impending Crisis in Field Artillery’s ability to provide Fire Support to Maneuver Commanders”*, this article sent shock waves through the Army and across the field artillery community.⁴⁶ A well researched document based on CTC observations, it verbalized the significance of the loss of the DIVARTYs to the fire support system as a whole and the effects the current organization and operational tempo (OPTEMPO) was having on the field artillery branch. The true power was that it was written by well

known and highly respected maneuver officers who were not afraid to voice their opinions.

Current State of the Field Artillery

This monograph will now examine the current state of the Field Artillery branch using the Doctrine, Organization, Training, Materiel, Leadership, Personnel and Facilities (DOTMLPF) construct, minus Materiel and Facilities. For brevity's sake, this analysis is not all inclusive, but will focus on the highlights and the major considerations impacting the professionalism of the field artillery branch.

Doctrine. The field artillery branch is catching up doctrinally with the shift to modular brigades that occurred across the Army over the last five years. The Army's keystone doctrinal manual for brigade centric operations, FM 3-0 *Operations* was published in February of 2008. In it, the basic Warfighting Functions (WFF) of movement and maneuver, intelligence, fires, sustainment, command and control and protection. The fires WFF includes all tasks and systems that provide collective and coordinated use of Army indirect fires, joint fires, and command and control warfare, including nonlethal fires, through the targeting process.⁴⁷ Clearly the targeting process is the focal point of the fires WFF and fully incorporates both lethal and non lethal fires and effects into the process. FM 3-07, *Stability Operations* expands these non-lethal considerations to include both constructive activities, as well, as coercive activities including aspects of command and control warfare, information operations and information engagement.⁴⁸ The fires cells at each level, division down to battalion are doctrinally responsible for coordinating and synchronizing these effects for the maneuver commander.

FM 3-09, *Fire Support*, scheduled for publication in 2009 is the new companion manual for FM 3-0 Operations. It is the keystone manual for fire support and addresses fire support considerations across the spectrum of conflict. Although a recent addition to the FM 3.0 family, it will correct a major challenge from modularity for the field artillery Table of Organization and Equipment (TO&E). Among other things, it will define the roles, responsibilities, and duties of the Fire Support Coordinator at Brigade level and reestablish the Fires Battalion Commander as the FSCOORD in maneuver brigades.⁴⁹ This is the single biggest flaw in the modular concept as it relates to fire support and the responsibility for much of the decline in the core capability of the fire support system at the brigade level and below.⁵⁰ It will also allow maneuver brigade commanders to consolidate 13F fire support personnel under one headquarters within the brigade in order to facilitate training and oversight.⁵¹

FM 3-09.24, *The Fires Brigade* is also scheduled for publication in 2009. This document describes the Fires Brigade (FIB) in full spectrum operations and replaces FM 3-09.22 *TTP for Corps Artillery, Division Artillery, and Field Artillery Brigade Operations* published in 2001. A key change to this manual directs the FIB to act as the Force Field Artillery (FFA) Headquarters when its controlling headquarters (Division) directs and to further be responsible to provide technical oversight of all FA specific training with the controlling headquarters' subordinate units; specifically maneuver BCTs. Clearly, this is the means to offset the loss of the DIVARTYs Army-wide and to address the concerns of maneuver commanders who view that loss as potentially catastrophic to the fire support system.⁵² FM 3-09.22 also addresses enhancing the capabilities of the FIB that includes the planning, synchronization, and employment of

Special Operations Forces (SOF), Information Operations (IO), Civil Affairs (CA), and Airspace Command and Control (AC2) elements.

Organization. The move to a brigade centric, modular force also led to the dissolution of units traditionally tied to divisions and corps for certain operations. For the purposes of this monograph this means Corps Artillery Headquarters and Division Artilleries. Four active component Corps Artillery Headquarters and ten DIVARTYs were deactivated and six FIBs were designated in their place to support the same ten divisions and four corps units.⁵³ Of the six FIBs, only two (FT Bragg, N.C. and FT. Hood Texas) are located on posts with habitually associated division headquarters. The remainders are left to establish some semblance of a support relationship from offset locations.

The assumption is FIBs will fulfill the vacant FFA HQs and Training, Readiness and Oversight (TRO) roles. It is not working. The limited number of FIBs, their extended proximity and their inclusion in the ARFORGEN cycle creates a void in training and an obvious capabilities gap.⁵⁴ Universally, division commanders request their own fires brigade to provide TRO of their organic organizations and to act as a FFA HQs upon deployment.⁵⁵ The current Total Army Analysis establishes the requirement for three additional FIBs in order to meet the needs of the Army, but no resources or plan to do so exist to meet the requirement.⁵⁶ Additionally, there is sufficient feedback from units in combat that the fires and effects cell at the division level are deficient in skills and manning. They regularly require augmentation by more than twenty personnel to be effective. These needs include Intelligence, Surveillance and Reconnaissance (ISR) and Artillery Target Analysis personnel routinely taken from a FIB.⁵⁷

While the new FM 3-09 *Fires Support* addresses the shortfalls originally associated with the FSCOORD mismatch at Brigade level, there are still organizational issues affecting the fire support system, specifically the assignment of 13F fire support personnel. In legacy artillery battalions all 13Fs were assigned to the field artillery battalion's Headquarters Battery. When needed for training and combat operations, they cross attached these teams to their habitually associated maneuver units. Under modularity, the Army now assigns 13Fs directly to maneuver battalions and to the Brigade Headquarters. The result of this decision boils down to three key issues. First, this limits the Fires Battalion Commander's ability to integrate and conduct any brigade level training of the fire support system from sensor to shooter. Second, because they are assigned to maneuver units, the FA battalion commander cannot unilaterally move 13 series Soldiers, NCOs and Officers to meet unit or brigade shortfalls. He best understands the experience and capabilities of these soldiers, but cannot take action across the brigade to appropriately manage a limited competency and capability. Finally, the current system distributes the responsibility for the entire fire support system from one single commander across five battalion commanders and one brigade commander. There are very few current maneuver commanders who applaud or like this solution. Most are voicing concern that while this model fits the modular concept, it is not effective for training and skill proficiency.⁵⁸

As noted earlier, battalion level changes include restructuring the battalions from a three battery, each with six guns, organization to a two battery, each with eight guns organization. In heavy units, the overall loss of two howitzers from eighteen to sixteen guns is not significant to the novice. However, the loss of the two battery fire direction

centers is important. The loss now reduces the fires battalion's ability to support the brigade with multiple fire missions by one third. Many of the modularity planners cite the loss as insignificant noting the HBCT only has two maneuver battalions versus the three in legacy brigades. They also state the accessibility to joint fires will offset the loss of two battery FDCs. This is not true and the suggestion disingenuous. These planners forget the reconnaissance squadron now organic to the HBCT, is a much lighter organization than its maneuver counterparts. In fact, the squadron is likely to have a greater requirement for supporting fires than a maneuver battalion due to the nature of its mission and composition.

To be fair, in light units, the changes introduced by modularity actually increase their capability. The overall reduction in tube strength is insignificant. Originally staffed and equipped with six gun batteries for a total of eighteen guns and three battery FDCs across the battalion. Modularity actually increases the number of guns in the batteries to eight, thus allowing for two four gun platoons per battery and a total of four FDCs in the new light fires battalion. Although in the aggregate, the light fires battalion loses two gun tubes and one battery, they in fact became more capable with the tactical agility of two four gun platoons.

Training. Training proficiency of artillery units and individual Soldiers continues to be the single biggest concern for leaders Army wide.⁵⁹ Clearly, the functional environment in Iraq and Afghanistan dictates the priority training requirements for deploying units, and generally speaking the organic field artillery unit becomes the bill-payer or contingency plan for non-standard missions assigned to a BCT.⁶⁰ There are numerous sources available to determine the current skill proficiency of fire supporters

across the Army. They include anecdotal accounts by serving field artillery leaders already referenced in this document. Second are observations from CTCs, which provide good indicators of levels of proficiency across the force since they observe almost every unit during mission rehearsal exercises (MREs) prior to deploying into theater. There are direct studies on the issue by contracted independent study groups such as The Rand Corporation. Finally, there are numerous documents available through the Center for Army Lessons Learned (CALL).

Universally, the conclusion is the same. Because of the numerous in lieu of missions and a lack of senior oversight, the overall core competency of the average 13 series Soldier has degraded significantly. A recent RAND study showed that M109A6 Paladin batteries consistently trend lower in skill proficiency than similar infantry and armor organizations while on rotation at the NTC.⁶¹ Fully 80% of the tasks assessed are now considered at risk when in the past units executed very few tasks poorly.⁶² Again, this is due to the current operating environment offering artillery units little opportunity to practice “conventional” tasks and skills. Furthermore, the same study indicated from surveys of field artillery junior officers (Majors – Lieutenants) that they were disproportionately less confident in their ability to perform battle staff functions associated with field artillery and fire support skills in mid to high intensity combat.⁶³ CTC trends likewise show an extremely disturbing trend. Virtually every rotational unit is encountering firing incidents in the calibration phase and most are due to gross crew drill error.⁶⁴ Similarly, 90% of fire support personnel arriving at the CTCs have not conducted fire support certification training and are serving outside their military occupational specialty.⁶⁵ Certainly, much of the training shortfalls are a result of the

OPTEMPO and lack of dedicated training time for units' cueing up to deploy. However, as noted in *The King and I*, modularity places the responsibility for training the fire support system on maneuver commanders who are neither trained nor resourced to perform these tasks.⁶⁶

Leadership. The impact of the modular structure on the development of junior and mid grade field artillery leaders is potentially the most damaging aspect of the recent changes. The loss of thirteen active component brigade level commands and four general officer level commands negatively impacted the branch in several ways. First, the loss of 60% of the brigade command billets seriously degrades the career progression of field artillery officers beyond battalion level command. While the Army continues to advertise all maneuver brigade commands are open to artillery officers, none have been selected since the announcement. Similarly, the deactivation of four Corps Artillery general officer command billets also seriously degrades the branches' ability for adequate representation at the flag officer rank.⁶⁷ Analysis of the Army General Officer Public Roster demonstrates this fact. In 2003 the number of basic branch field artillery general officers by grade was 22% for General, 12.5% for Lieutenant General, 10% for Major General, and 10% for Brigadier General.⁶⁸ The current roster lists 7% for General, 10.9% for Lieutenant General, 12% for Major General, and 5 % for Brigadier General.⁶⁹ This clearly demonstrates a decrease by half the accessions of Field Artillery officers into the general officer ranks.⁷⁰

While the net gain for active component field artillery battalion commands did rise by six billets, the lack of a senior officer to mentor and train battalion commanders is troublesome. There is a general assumption by modularity planners that any officer

selected for battalion command is wholly tactically and technically proficient in that branch. The continuing operational requirement for field artillery majors and captains to fill military transition team billets is profoundly affecting their development. A sizeable population of mid grade officers without adequate experience in line units will exist prior to taking command at their respective levels.⁷¹ This proficiency gap is real and fraught with consequences exacerbated by the lack of competency already identified by maneuver brigade commanders. With no senior field artillery officer to mentor these officers, the professionalism and competency of the branch will be seriously degraded.⁷²

Personnel. The personnel situation in the field artillery is a good news - bad news situation. On the enlisted side, the branch is at a strong 104% fill.⁷³ There are select shortages in the radar (13R) and fire direction specialist (13P) occupational skills, but overall the enlisted side of the field artillery branch is in good health. The artillery warrant officers (131A) are short by 30% due to the unexpected doubling of the force but are expecting to be at near 100% fill in the next two years. As with commissioned officers, warrant officers take time to develop and any reduction in accession time dramatically reduces the quality of these technicians.

The field artillery officer situation is serious, particularly at the junior officer level. Attrition at the captain grade is 13% annually, 3% higher than the Army rate of 10% and three times higher than historical norms.⁷⁴ Across all grades and year groups, the available strength cannot meet demand.⁷⁵ Of greater concern is the exodus of officers at the captain and senior lieutenant rank. Not only are artillery captains more likely than any other branch or officer grade to leave the Army, but lieutenants who fill assignments in maneuver units are branch transferring to Infantry and Armor at much higher levels.⁷⁶

The feedback supports the belief that since these officers have no field artillery mentorship or influence, they tend to gravitate to the officers they receive mentoring from on a daily basis, their Infantry and Armor Company Commanders. Accessions into the Field Artillery branch is seriously lacking over the past several years. In fact, for the last four years United States Military Academy Cadet requests for artillery branch assignment is at the lowest rates in decades.⁷⁷ This year cadets requesting field artillery branch achieved traditional norms, but only due to the extraordinary efforts of the Field Artillery Proponency Office (FAPO).

The Field Artillery Campaign Plan

In the summer of 2008, the Chief of the Field Artillery, MG Peter Vangel unveiled what is now known as the Field Artillery Campaign Plan. This Campaign Plan was in response to the overwhelming evidence that the fire support community was beginning to lose its handle on core competency Army-wide in this era of persistent conflict. As MG Vangel stated in his commander's comments in *Fires* magazine,

As we developed the FA Campaign Plan, it was clear that it would have to be an iterative, responsive process. Operations tempo, repetitive nonstandard missions, the effects of modularity and a rapidly increasing lethal and non-lethal skill set were just a few of the factors that have caused significant atrophy in FA core competencies. This atrophy has left the Branch unbalanced and not postured for the future.⁷⁸

The basis of the plan is three pillars: restore senior leader oversight, rebuild the FA experience base, and re-establish a training capacity. Field Artillery branch is already implementing parts of the plan, but other aspects will require approval and resourcing from Department of the Army⁷⁹.

The restoration of senior leader oversight has two basic tenants: reestablish the fires battalion commander as the FSCOORD in the BCTs and increase the number of

FIBs. In July 2008, the Training and Doctrine Command (TRADOC) Commander, GEN William Wallace was briefed on the impact of the FSCOORD dilemma. Based on his own personal experience and the input of over twenty-five former Brigade Commanders, he decided that the fires battalion commander should indeed be the FSCOORD. Additionally, GEN Wallace noted that the fires battalion commander must recommend to the BCT commander the best location for the fire supporters across the BCT in order to accomplish training, oversight and professional development. He directed that these changes be incorporated by the U.S. Army Combined Arms Center (CAC) at Fort Leavenworth into FM 3-09 *Fire Support*, as well as FM 3-09.6 *The Brigade Combat Team*.

The second part of the restoration of senior leader oversight is the requirement for additional FIBs. Every corps and division commander interviewed by MG Vangel acknowledged the need for one FIB per division headquarters.⁸⁰ The current Total Army Analysis (TAA) validated the requirement for three additional FIBs; however there currently is no resourcing plan for these additional requirements. Each division commander was asked to place the FIBs high on their list of sourcing priorities but whether or not the Army is able to find the resources is another matter. Should the Army resource the FIBs, it would only make sense to synchronize their ARFORGEN cycle with their associated division headquarters. This will dramatically improve the oversight of the fire support system within each division and place the responsibility for lethal and non-lethal fires squarely with one individual. Including the FIBs into the ARFORGEN cycle will also dramatically improve readiness since the FIB organic units will be

programmed for deployment with parent headquarters instead of the random, piecemeal process currently employed.

It is essential to rebuild the FA experience base. This problem, although more a function of continuous deployments associated with the current operational tempo, is still a very real concern. As one senior NCO noted,

As a future Sergeant Major, I'm concerned about a "generation lost." Soldiers who aren't trained and NCOs who are unable to train them. We are losing the backbone of the trainers in our unit.⁸¹

In an effort to begin to correct the problem at an institutional level, the FA Captain's Career Course will expand from twenty to twenty-four weeks and several NCO Education System (NCOES) courses will also expand.⁸² The CG TRADOC also suggests allowing CPTs to go TDY to the course and return to their units to take command or become battalion FSOs as a means of sustaining continuity. At the Intermediate Level of Education (ILE), CAC will refine the fires period of instruction will for both maneuver and field artillery officers.⁸³ They will tailor each course for the audience with the intent to produce well rounded officers competent in the art and science of fire support and fire integration.

In order to reestablish a training capacity across the force, it is clear that a shift in focus exist. The United States Army Field Artillery School (USAFAS) possesses the expertise and requisite knowledge to retrain the force, but seemingly only in an institutional setting. In an effort to help operational units preparing for deployment or already in theater, the USAFAS utilizes robust Mobile Training Teams (MTT) capable of deploying either in the U.S. or overseas. These MTTs are modular and designed to work within the ARFORGEN cycle. BCT commanders can tailor the package they need anywhere from observer to gun section. This is a major shift in the focus of the

USAFAS from a purely institutional training capability to an operational training resource.

Recommendations

There is no doubt that the current requirements in support of operations Iraq and Afghanistan undeniably stresses the force nearly to its breaking point. The Army's own posture statement acknowledges that the Army is "out of balance" and continues to "focus on training for counterinsurgency operations to the exclusion of other capabilities."⁸⁴ This leaves the force capable yet ineffective in some areas. Field Artillery as a branch absorbed dramatic changes under the auspices of modernizing the Army. The change included dissolving eighteen senior artillery command positions above battalion level across the active component, removing the fires battalion commander as the FSCOORD at the brigade level, and lastly divesting all fire support assets from the control of the fires battalion and placing it organic to each maneuver element in the BCT. These three dramatic changes combined with an insatiable appetite for more "boots on the ground" in the form of in lieu of missions cracked the foundation of one of the Army's oldest combat arms branches. Unfortunately, the climate in the Army regarding modularity leaves little room for dissenting opinions. "Get on board or get out of the way" is a common mantra or leaders can simply risk branding as a branch parochialist.⁸⁵ It took three former maneuver brigade commanders writing a white paper to ignite a discussion on the adverse effect that modularity and the focus on counterinsurgency is having on field artillery branch. Their credibility and message is extremely powerful. In fact, the diminished capability of this primary warfighting

functions is the most oft used example of the adverse effects of five years of persistent conflict on the active Army.⁸⁶

So how does the Army correct the downward trend and restore full spectrum capability to the field artillery? First, implement the Field Artillery Campaign Plan. The most significant challenge to the measures proposed in the FACP is to stand up three new fires brigades as recommended by the TAA. Obviously finding the resources for the three new brigades is the challenge but there is a workable solution. The Army must immediately revise the current FIB table of organization and equipment to reflect one rocket battalion (MLRS or HIMARS depending on the type of unit, mechanized or light) and one cannon battalion. Interestingly, this one plus one construct is the product of an after action review recommendation by 3d Infantry Division immediately following OIF1.⁸⁷ If the Army implements the current re-stationing plan an immediate gain of two MLRS battalions, two HIMARS battalions and one towed cannon battalion is available to create 83% percent of the combat elements of the new FIBs need instantly. The Army will need to generate the signal companies, support battalions and headquarters elements for three FIBs at a cost of 1,950 personnel spaces.⁸⁸ Since one IBCT requires 3,300 personnel, it must be feasible to reallocate 59% of those positions to fill three FIBs. The positive impact of correcting an Army wide problem is a viable bill-payer for a single infantry brigade.

Additionally, as part of the stationing plan, it is vital to position the FIB and align it habitually with a Division headquarters. This requires moving the two Fort Sill FIBs⁸⁹ to another post, possibly Fort Carson, Colorado and Fort Riley, Kansas to cover the 4th and 1st Infantry Divisions, respectively. While this involves numerous challenges to

move units, the infrastructure at each post can accommodate these moves. To help balance the re-stationing, Fort Sill can accept an IBCT in lieu of one of the three battalion FIBs currently stationed there.

The second major change is to reconstitute coding the Corps level FSCOORD position for a Brigadier General. These positions require a level of expertise and experience not found at the O6 level. LTG Odierno acknowledged this fact in his recent interview with *Fires* magazine. He stated "It (the corps fire cell) needed the experience, expertise and authority of a general officer as its chief."⁹⁰ He further stated "It is time for the Army to authorize a brigadier general as the chief of the corps fire cell."⁹¹

Finally, change the TOE of the fires battalions and reconsolidate the fire support elements of each BCT under the command of the fires battalion commander. This will place the responsibility for the entire fire support system where it traditionally lay, back under the BCT FSCOORD. He is the appropriate person to train and certify these assets. There will likely be immediate resistance from the maneuver community until they realize their fire supporters will receive better training and integrate faster and more effectively with current operational requirements.

Conclusion

U.S. artillery Soldiers display on a daily basis incredible flexibility, adaptability, and resiliency. They perform virtually every conceivable mission set the Army demands: artillery, infantry, truck drivers, civilian police trainers and military police, all with exceptional results.⁹² The capability of the artillery community to conduct operations across all spectrums of conflict is severely degraded by doctrinal and organizational changes intended to make the force lighter and more responsive. In fact,

what has happened is just the opposite. A well-intentioned effort to modernize the Army and make it more expeditionary has in fact had a reverse effect and degraded its ability to operate across the spectrum of conflict. The sad reality is that after six years of counter-insurgency conflict, the Army could not achieve today what it did in 2003 during initial rapid decisive operations of Operation Iraqi Freedom.

The artillery force, while numerically superior in number of battalions to the Army of 2003, is less capable. Training is suffering, artillery junior grade officers are leaving the branch in numbers never before seen, and the branch is consumed in a service-level capabilities struggle. The effort to make the Army more agile through Modularity seriously degraded the primary organic fire support in Army combat organizations. That should be a resounding alarm to all Army leaders just as it was to Colonels McFarland, Snow and Shields. The Army gained its well deserved reputation in 1991 and again in 2003 for being the premier land force on the planet by synchronizing all elements of combat power at its disposal- including surface to surface and air to surface fires. What was broken? Army leadership in 2004 mortgaged the capability to conduct combat on the high end of the spectrum to impose a sense of Jointness that was already present and to simply provide more “boots on the ground” in the Iraq and Afghanistan contingencies.

General Casey is right. It is time to rebalance the Army.⁹³ And it is time to fix the deficiencies created in the field artillery branch in 2004 and 2005 before it is too late. The Fires Warfighting Function at division level and below must be restored to its 2003 level of capability. There is more at risk than the simple title “The King of Battle.” If course corrections regarding the field artillery are not made in the immediate future, the

United States Army's reason for existence- the ability to win its nation's wars- is no longer a certain outcome. That prospect, like a weakened and irrelevant field artillery force, is simply unacceptable.

Endnotes

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